

REMARKS

In claims 1 and 9, "suitable" has been deleted. Moreover, Applicants identified minor errors in the formulae II and IV of both claims as well as the specification. Here the counterion X^- was mentioned in the legends of the formulae, although no counterion is identified in either of these formulae. Accordingly, X^- has been deleted from both formulae II and IV.

Claim 8 has been amended to recite that "... the counterion X^- is selected from the group. . . ."

With respect to claim 2, for determination of this molecular weight Applicants used the crude data derived from GPC experiments without further processing. Applicants submit that it is clear that the weight average molecular weight is meant.

With respect to the objection regarding the viscosities, Applicants submit that from the entirety of the specification it is clear that water soluble block copolymers are addressed. Therefore, a measurement of viscosity only is reasonable if carried out in water. Furthermore, in example 1 (page 8 of the present application) the viscosity index is defined via an evaluation in 1 N NaCl solution. Since water is the standard solvent for NaCl, Applicants submit that no ambiguities exist.

"Methosulfate" is a term well known by the persons of ordinary skill in the art to which the present invention pertains. Methosulfate represents the monomethylsulfate anion, which in this case is derived from the methylation reaction of a tertiary amine (namely diallylmethylamine) with dimethylsulfate, which produces the DADMAC monomer. Applicants note, for example, that the same term is used in Neff U. S. Patent 5,882,525 (hereinafter Neff), cited by the Examiner. See, for example, Neff, col. 20, line 44.

In claim 16, "the inverse . . ." has been amended to recite "an inverse . . ." Claims 17 and 18 have been cancelled without prejudice, and have been replaced by independent claims 21 and 22, respectively.

The Examiner rejected claims 1-20 under 35 U. S. C. § 103. In support of this rejection, the Examiner relied upon the combination of Neff and Bhattacharyya U. S. Patent 4,713,431 (hereinafter Bhattacharyya). The Examiner noted that Neff discloses no examples of materials which are derived from the same starting materials (DADMAC + PEGDMA). The only examples in Neff containing PEGDMA as branching agent (examples 10 and 11) disclose that PEGDMA is used in a weight ratio of 49.4 wppm and 123.4 wppm, respectively, but in these

examples, PEGDMA appears in combination with different acrylic monomers, namely a mixture of MBA and Q-9. Therefore, the values given for the weight ratio for PEGDMA in Neff's examples 10 and 11 cannot be compared with the values given in present application, since substantially different acrylic monomers are used. Moreover, the table in Neff representing examples 10 and 11 also discloses the corresponding molar ratio in mppm, which is substantially lower than the ratio given in the present application. Please see page 8, line 30 of the description, from which it is clear that the molar ratio of the crosslinking agent (PEGDMA) lies in the range of 0.7 mmol per mol acrylic monomer (DADMAC), being equal to a molar ratio of 700 mppm. As demonstrated, the weight ratios according to the invention represent totally different molar ratios and thus demonstrate that, compared to Neff, much larger amounts of crosslinking agent (PEGDMA) are used.

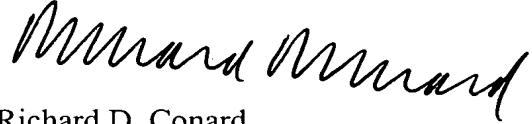
Thus, the present application not only differs in its starting compounds, but also in the ratios in which the starting compounds are used. Furthermore, Neff does not give any hint regarding raising the amount of the crosslinking agent.

Furthermore, Neff describes as essential for carrying out Neff's method to use a "chain-transfer agent" ("It is extremely important that optimum concentrations of chain-transfer agent be employed in order to produce a highly branched, water-soluble product. Addition of too little chain-transfer agent produces a non-soluble copolymer product and the addition of too much chain-transfer agent produces a product with too low a solution viscosity, i.e. molecular weight"), which is dissolved together with the branching agent in deionized water (Neff, col. 6, 1. 39). The present application also differs in this point when compared with Neff, since no comparable compounds are used (see examples).

Neither does Bhattacharyya teach any compound described by present claim 1, not even in combination with Neff.

Applicants hereby petition for a one month extension of the term for response from August 16, 2007 to September 16, 2007. Please charge any fees that might be due in connection with this petition for an extension of time, as well as any other fees which may be necessary to constitute this a timely response to the May 16, 2007 official action, to our Deposit Account No. 10-0435, using our reference number 127-75824.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard D. Conard", written in a cursive style.

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